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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
08/745,827	11/12/96	SMITH	E 96-VN-1

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PM51/0308

EXAMINER	
ZANELLI, M	
ART UNIT	PAPER NUMBER
3661	7

DATE MAILED: 03/08/99

Please find below a communication from the EXAMINER in charge of this application.

Commissioner of Patents

see attached

# Office Action Summary

Application/No.

08/745827

Applicant(s)

Smith et al.

Examiner

M. Zmelly

Group Art Unit

3661

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Response

A SHORTENED STATUTORY PERIOD FOR RESPONSE IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a response be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for response is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to respond within the set or extended period for response will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

☒ Responsive to communication(s) filed on 2/3/99

☒ This action is **FINAL**.

- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

☒ Claim(s) 7, 8 & 11-29 is/are pending in the application.

Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☒ Claim(s) 7, 8 & 11-25 is/are allowed.

☒ Claim(s) 26 is/are rejected.

☒ Claim(s) 27-29 is/are objected to.

- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☒ The proposed drawing correction, filed on 2/3/99 is ☒ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_.

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of References Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

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### DETAILED ACTION

1. This is responsive to the communication filed 2/23/99. Claims 7, 8, and 11-29 are currently pending.

2. The proposed drawing correction has been approved.

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Margolin (5,566,073; hereinafter Margolin) or Monson (5,721,679; hereinafter Monson) in view of Allison (5,148,179; hereinafter Allison).

A. Margolin discloses a digital computer system for generating a three-dimensional representation of the terrain over which the vehicle is operating (Abs.). As shown in Fig. 1, the system includes a digital computer (107), a position information unit (101) for providing satellite-based positioning data, a terrain database (105), and an image processing unit (108, 109) for generating a three-dimensional display of the terrain over which the vehicle is operating. See col. 6, lines 7-65.

B. Monson discloses a computer-based system for generating a three-dimensional terrain map over which a vehicle is traversing. As shown in Fig. 9, the system includes a digital computer (22), a navigational locator (66) for producing position information, a memory (64) for storing geographical information, and a display device (48) for displaying a three-dimensional map of the terrain over which the vehicle is

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operating (Figs. 1 and 2). See col. 8, lines 5-19; col. 8, line 62 to col. 9, line 4; col. 12, lines 42-60; col. 13, lines 27-36.

C. Both Margolin and Monson use GPS for providing location data. The claimed invention differs in that differential GPS (DGPS) is used. However, at the time of applicant's invention it was well-known in the navigation arts that one could achieve more accurate location data by using DGPS (see for example Allison at col. 1, lines 17-31). It would have been obvious to one of ordinary skill in the art to incorporate DGPS into the systems of Margolin and Monson because of the recognized improvement in location determination in GPS-based systems.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. **REMARKS**

A. The above rejection was necessitated by the addition of new claim 26, which closely mirrors canceled claims 1 and 2. The only apparent difference appears to be the substitution of DGPS for GPS.

B. Applicant appears to imply that claim 26 should be allowed since claim 15, which also contains the DGPS limitation, was indicated as allowable. The examiner disagrees. Claim 15 was indicated as allowable based on its dependency to allowed claim 13. The examiner did not indicate that the subject matter of claim 15, in and of itself, would have imparted patentability on an otherwise unpatentable claim 13.

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C. Claims 7, 8, and 11-25 are allowed.

D. Claims 27-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Applicant's amendment necessitated the new ground of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Michael Zanelli** whose telephone number is **(703) 305-9756** (M-Th, 6:30-5:00 PM).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is **(703) 308-1113**.

/mjz  
March 2, 1999

  
**MICHAEL ZANELLI**  
**PRIMARY EXAMINER**